

Title (en)

METHOD OF MANUFACTURING PATTERN ON A SUBSTRATE WEB AND APPARATUS THEREFOR

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES MUSTERS AUF EINE SUBSTRATBAHN UND VORRICHTUNG DAFÜR

Title (fr)

PROCÉDÉ POUR LA FABRICATION D'UN MOTIF SUR UNE BANDE DE SUBSTRAT ET APPAREIL ASSOCIÉ

Publication

EP 3049249 B1 20181121 (EN)

Application

EP 14777127 A 20140926

Priority

- GB 201317195 A 20130927
- GB 201318683 A 20131022
- GB 2014052914 W 20140926

Abstract (en)

[origin: WO2015044671A1] A method of manufacturing a pattern on a substrate web is disclosed, comprising: providing a production tool having a surface relief structure of elevations and depressions, the elevations corresponding to the desired pattern to be applied to the substrate web. A curable material is applied to the elevations of the surface relief structure on the production tool. The applied curable material on the surface relief structure is brought into contact with a substrate web at a first location. The substrate web and surface relief structure are transported together in contact from the first location to a second location, the first and second locations being spaced from one another along the transport direction of the substrate web. The substrate web is separated from the surface relief structure at the second location whereupon the curable material forming the pattern is affixed to and carried by the substrate web. The curable material on the substrate web is cured by exposure to at least one curing energy source, either while the substrate web and surface relief structure are in contact between the first and second locations and/or after the substrate web has been separated from the surface relief structure at the second location.

IPC 8 full level

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CPC (source: EP GB US)

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Citation (examination)

US 4420502 A 19831213 - CONLEY KENNETH E [US]

Citation (opposition)

- Opponent : Giesecke+Devrient Currency Technology GmbH
- EP 0338378 A2 19891025 - AMERICAN BANK NOTE HOLOGRAPHIC [US]
 - US 6440277 B1 20020827 - D AMATO SALVATORE F [US]
 - US 5083850 A 19920128 - MALLIK DONALD W [US], et al
 - WO 2006132919 A2 20061214 - HOLOINKS INC [US], et al
 - DE 4132476 A1 19930401 - MATTHIESSEN GEB SIEVERS GERDA [DE]
 - WO 2008060864 A1 20080522 - 3M INNOVATIVE PROPERTIES CO [US], et al
 - WO 2005052650 A2 20050609 - NANOVENTIONS INC [US], et al

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